

The Mystery of Pointillism

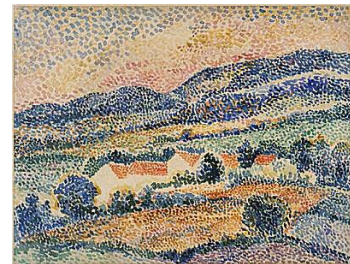


My Pointillism Artwork

The mind is full of all kinds of mysteries. Several phenomena the mind does, scientist cannot explain. Some of these unfathomable events occur in the realm of art due to peculiar optics between the eye and brain. One form of artwork,

called pointillism, was a revolutionary new style of painting during the Neo-Impressionism art movement in the late 1800s France. Throughout the movement, artwork emphasized the importance of optics more than ever. The so called “grandfather” of pointillism is a man by the name of Georges Seurat. After his groundbreaking introduction to this concept, many would follow in his footsteps after his death. Pointillism involves the use of dots; not your traditional paintings with smooth strokes and lines. The dots are placed very close to each other and do not overlap, which creates a blending effect from a far distance. Up close the image may seem awkward; however, the idea of pointillism is separate, distinct application of pigments will create better color liveliness. This is due to additive color mixing of light by the eye rather than subtractive color mixing with pigments. In order to better understand how this concept works, one must understand the anatomy of the eye and how light interpretation works at a molecular level. While there are two theories on how we see, the more famous hypothesis stems from the Young-Helmholtz theory. This theory states the eye has two types of cells—rods and cones. Rods are responsible for light/dark stimulation, and cones give us our color vision. Cone cells contain three different pigments that are sensitive to red, green, and blue light. When these wavelengths of light hit the cone cells, they become stimulated and an action potential occurs. This action potential follows an intricate neural network where the brain then interprets it, and we understand it as color. This biochemical activity is how we interpret the

colors and shapes around us. However, it is interesting that we see a blended photo from afar and not just a bunch of dots. Pointillism is not the only type of artwork that can create a type of allusion. The Moiré Effect creates an illusion of movement. We have all seen these types of artwork. The close, adjacent, overlapping patterns may give you a headache to look at, but it is a unique type of artwork. My artwork in the upper left hand corner is supposed to be some starfish, fish, rocks, and a treasure chest. The picture is obviously taken up close, and from far away you can certainly see some of the blending effect. What I liked most about this lab was the fact it opened up my eyes to a whole new form of art I never knew existed. The lab also relates to the fine arts general education learning objectives. Specifically, it helped everyone demonstrate an understanding of an artistic tradition. There is no doubt I have a newfound respect for this type of artwork because it is very meticulous. My artwork may not look very great; however, it still takes time to plan what type of colors you use and how the colors will ultimately blend in to create a worthy picture. We also did this assignment with sharpie pens on a small piece of paper. I could not imagine having to do this with a paint brush on a large canvas. Nonetheless, this type of artwork has been around for a while, and you



Professional Pointillism¹

have to respect the skill and planning involved in it. It is very fascinating that science is in a huge portion of artwork. In the case of pointillism, it involves very complex biochemical reactions between the eye and brain to create this wonderful blending effect. So far I have really enjoyed the type of artwork we have studied because they all seem to be unique styles. Although it may be hard to create this type of artwork, it is definitely fun to give it a try.

¹ <http://commons.wikimedia.org/wiki/Pointillism>